DOCUMENT RESUME

ED 199 497 CE 028 308

TITLE Bilingual Skills Training Program. Barbering/Cosmetology. Module 1.0: Bacteriology.
INSTITUTION Northern New Mexico Community Coll., El Rito.
PUB DATE [80]
NOTE 49p.; Some pages will not reproduce well due to light print. For related documents see CE 028 291.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Adult Vocational Education; *Barbers; Behavioral Objectives; *Bilingual Education; Biology; *Cosmetologists; Cosmetology; Diseases; Individualized Instruction; Learning Activities; Learning Modules; Postsecondary Education; Pretests Posttests; Second Language Learning; Service Occupations; *Spanish; Trade and Industrial Education; *Vocabulary Development
IDENTIFIERS *Bacteriology

ABSTRACT

This module on bacteriology is the first of ten (CE 028 308-318) in the barbering/cosmetology course of a bilingual skills training program. (A Vocabulary Development Workbook for modules 6-10 is available as CE 028 313.) The course is designed to furnish theoretical and laboratory experience. Module objectives are for students to develop trade-related Spanish/English vocabulary; to classify and define bacteria as to types; to name and illustrate members of the cocci, spirilla, and bacilli families and name diseases caused by each; and to define and give examples of parasites and saprophytes. Contents include list of module objectives; pretest; five sections on (1) definition of bacteria, (2) classification of bacteria, (3) cocci and spirilla bacteria, (4) bacilli bacteria, and (5) saprophytes and parasites; posttest; and English/Spanish vocabulary list. Each section is organized into this format: instructions, vocabulary, and concepts (statements or questions to direct reading) presented in English and Spanish; readings; and worksheets to evaluate comprehension of the trade-related reading material. (Readings in modules 1-5 are in both English and Spannish.) Worksheets also cover these areas: vocabulary, definitions, word attack skills, writing skills, spelling, and application of terminology to the trade area. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED199497

BILINGUAL SKILLS TRAINING PROGRAM

BARBERING/COSMETOLOGY
MODULE 1.0

B A C T E R I O L O G Y

CE 028 308

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

P. Felix

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

NORTHERN NEW MEXICO COMMUNITY COLLEGE
EL RITO, NEW MEXICO 87530

I. PURPOSE

This module is to:

1. Assist students in developing trade-related vocabulary.

2. Facilitate the learning of the trade through reading information sheets, vocabulary lists and language exercises.

3. Provide student with individual check lists for individual progress.

II. INRODUCTION

Cosmetology and Barbering require the student to follow a defined theoretical course of study as well as acquire practical knowledge in the respective trade. Due to the limited amount of time allowed for theory and the difficulty of the technical vocabulary found in the reading, the student often needs additional help in this area. Students in above trades are required to pass the State Board Examination before practicing their trade. To succeed in passing this exam and to be better equipped for the job, the student must be able to function in the oral and written communication skills and utilize the technical vocabulary of their trade. This module is structured to provide for individual needs of the students so that they may progress at their pace in the academic or theoretical area. A simple coding system is utilized to facilitate the student use.

III. ACTIVITIES

Because each module is geared for individualized instruction it is important to assess the individual needs of the students. A pre-test is administered to students before they begin working with a module. Instructions are given orally in Spanish and English.

Instructions, vocabulary and concepts in each module are written in Spanish and English so as to explain the purpose of each reading. There is a reading for each objective presented in the module. The reading is referred to as an information sheet. This sheet is designed to provide the student with reading material incorporating the technical vocabulary that is needed in the trade skill area. The gradation of reading is from simple to more complex. Thus the information sheet facilitates the learning process in the theoretical course of study. Each information sheet is followed by a series of diversified work sheets directly checking for comprehension of the reading material. Other items covered in these work sheets are: vocabulary, definitions, word attack skills, writing skills, spelling and application of terminology to the trade area.

Oral language development exercises directed by the instructor constantly reinforce the concepts presented. Students have an opportunity to utilize and develop the technical vocabulary needed in their trade by interaction among themselves, the instructor and tutors. The Bilingual dimension is specifically directed at concept and vocabulary development.

The students are directed to utilize supplementary materials available through the Learning Resource Center to reinforce each area as they progress in the module. Audio visuals are utilized to introduce subject matter. They are also accessible to the students to be used on an individual basis.

IV. EVALUATION

The students are evaluated by the instructors as to their progress in language and in the course content area through the pre-test, work sheets, check list and a post test. Individual student profiles and folders are kept on record to check on student progress at all times. Oral development skills are assessed individually.

Students go through the following process in utilizing the modules:

Pre-test (Students scoring 85% or below must complete the entire module. Those scoring above 85% may go on to the next module).

Reading of instruction sheet
Information sheet
Series of written and oral exercises
Oral evaluation
Post test (oral and written)
Recycling, if needed (Students scoring 85% or below on post-test are recycled through module in designated weak areas. See coding system.)

V. MODULE OUTLINE

1.0 Bacteriology

1.1 Definition of Bacteria

1.2 Classification of Bacteria

1.3 Cocci and Spirilla Bacteria

1.4 Bacilli Bacteria

1.5 Saprophytes and Parasites

STUDENT OBJECTIVES

After completing this module the student will be able to:

1.1 Define bacteria

1.2 Classify and define bacteria as to types.

1.2.1 Identify the three major types of pathogenic bacteria

1.3 Identify and describe the three members of the cocci family and name at least one disease caused by each.

1.3.1 Describe spirilla and name at least one disease it causes.

1.4 Name and illustrate the six members of the bacilli family and identify a disease each one causes.

1.5 Define and give example of parasites and saprophytes.

PRETEST FOR BACTERIOLOGY

1. Define bacteria and where it can be found.

2. What are the two types of bacteria?

3. How does bacteria reproduce?

4. What is meant by pathogenic and non-pathogenic?

5. Name three general types of pathogenic bacteria.

6. List the three members of the cocci bacteria family and their related diseases.

7. Name the six members of the bacilli family and their related diseases.

8. Draw the three basic shapes of bacteria.

9. What are saprophytes?

10. What are parasites?

11. What is a disease and how can it spread?

12. Explain what the word immune means.

13. Who was Louis Pasteur?

14. What is a micro-organism?

Instructions:

In this passage you will read about why people get sick. The information it contains will help you understand your trade better. You are provided with a list of words that are important in this article. Check each word carefully before you read the article.

Instrucciones:

En esta selección vas a leer las razones porque la gente se enferma. La información que contiene este artículo te ayudará a comprender mejor tu trabajo. Tienes una lista de palabras importantes que aparecen en este artículo. Lee cada palabra cuidadosamente.

Vocabulario	Vocabulary
enfermedad	disease
bacteria	bacteria
molde o mojo	mold
penicilina	penicillin
germen	germ
inmuno	immune
micro-organismo	micro-organism

Keep these questions in mind when you are reading this article.
Te debes de hacer estas preguntas al leer este artículo.

1. What is bacteria and where does bacteria grow?
   ¿Qué es bacteria y como crece?

2. How does bacteria reproduce?
   ¿Cómo se reproduce bacteria?

3. How can bacteria harm you?
   ¿Cómo te puede causar daño bacteria?

4. How can we cure diseases?
   ¿Cómo podemos curar enfermedades?

5. What does immune mean?
   ¿Qué significa la palabra inmuno?

Why Do People Get Sick?

1. Everyone has felt sick at one time or another. Have you ever stopped to ask yourself why you get sick? This question has been asked for many years and still cannot be answered completely. In New Mexico many people have died because they did not know how to prevent or cure a disease. People did not understand why all of a sudden someone from their family died because of a strange disease.

2. It was not until a man by the name of Louis Pasteur discovered what caused many diseases. This man lived in France and worked for many years on trying to discover causes of diseases. He stated that bacteria or germs are what cause people to get sick. He knew that he had to destroy bacteria. Later, many other scientists worked with bacteria and developed medicine to destroy bacteria. Penicillin was made from mold. Penicillin destroys bacteria in our bodies.

3. Bacteria affects your life everyday. Bacteria cannot be seen because it is too small. They are one celled vegetable micro-organisms. You probably know another word for bacteria. This word is germ. You can find germs in grocery stores, hospitals, rest rooms, schools, cafeterias, barbershops and also in your home. Germs are even carried by people just like you and me.

4. Bacteria grow or multiply by splitting themselves in half. You can imagine how hard it is to destroy germs or bacteria because they can multiply so fast. Today we are always in danger of getting sick because we are always coming in contact with germs. Some germs cannot hurt us because we are immune to them.

5. By immune we mean that our body is stronger than the germ. Babies are not very immune to diseases like Polio and Diphtheria. Most people are not immune to the flu. We expect to get immunized or given a shot to fight germs that cause sickness or death.

¿Por Qué Se Enferma La Gente?

1. Todos nos hemos enfermado en un tiempo u otro. Te has hecho la pregunta, ¿porqué es que te enfermas? Por muchos años nos hemos preguntado esto y todavía no hemos podido contestar la pregunta. En Nuevo México mucha gente murió porque no comprendía como prevenir o curar enfermedades. La gente no entendía porqué de repente algún miembro de la familia moría a causa de una enfermedad extraña.

2. Muchos anos después un señor llamado Louis Pasteur descubrió la causa de muchas enfermedades. Este hombre vivió en Francia y trabajó muchos años queriendo hallar la causa de enfermedades. Pasteur sabía que bacteria era lo que causaba enfermedades a la gente. El creía que era necesario destruír la bacteria. Después, otros científicos desarrollan una medicina para destruír la bacteria. Hicieron penicilina de molde o mojo. Penicilina destruye bacteria en nuestros cuerpos.

3. Bacteria afecta nuestra vida diariamente. La bacteria es muy pequeña o chica y no es posible verla. Son micro-organismos unicelulares. Ustedes posiblemente conocen otra palabra para bacteria. Esta palabra es "germen." Es posible encontrar gérmenes en una variedad de lugares como hospitales, lavoratorios, escuelas, restaurantes, peluquerías y hasta en sus propias casas. Gérmenes tambien existen en los cuerpos de personas como usted y yo.

4. La bacteria es capaz de reproducir por medio de división. Es decir, una bacteria se divide en dos partes formando dos bacterias independientes. Entonces usted puede imaginar el problema en querer destruír gérmenes o bacteria. Todos los días estamos en contacto con gérmenes. Así es que siempre estamos en peligro de enfermedades. Algunos gérmenes no son peligrosos porque somos inmunos a estos gérmenes.

5. Cuando hablamos de inmunidad queremos decir que el cuerpo está bastante fuerte para poder combatir a los gérmenes. Niños no son muy inmunos a enfermedades como polio y difteria. Mucha gente tampoco está inmuna a influenza. Esperamos ser inmunizados o inyectados para combatir gérmenes que causan enfermedades o muerte.

Find The Answers

1.1

1. The most famous individual who studied the causes of many diseases was

   A. John F. Kennedy
   B. Louis Pasteur
   C. Benjamin Franklin
   D. Albert Einstein

2. The word in paragraph 3 that means to convey or to transport is _____

   _____.

3. The words "cause people to get sick" in paragraph 2 refer to the word_____

   _____.

4. The story does not say so, but it makes you think that

   A. The causes of disease are not important to know.
   B. Bacteria is really not that dangerous.
   C. Sterilization and sanitation are extremely important.

5. Bacteria grow by splitting themselves in fourths.

   Yes No Does not say

6. On the whole, this story is about

   A. Going to see a French doctor
   B. Deaths in New Mexico
   C. Causes of human illness

7. Why is it important to know about preventing and curing disease? (Check the story again)

   A. Might help us in school
   B. To prevent deaths
   C. Doctors are expensive

Match the following words with the proper definition 1.1

_____immune	a. one celled micro-organism
_____immunized	b. be able to resist or fight disease
_____germ	c. given a shot to fight disease
_____micro-organism	d. small living matter
_____destroy	e. material from which penicillin is made
_____mold	f. to multiply or grow in numbers
_____penicillin	g. to get rid of
_____disease	h. is caused by bacteria
_____bacteria	i. another word for bacteria
_____reproduce	j. medicine used to fight diseases

Fill in the blanks with the word you think belongs without looking back at the original article.

Everyone has felt sick _____one time or another.

_____you ever stopped to _____yourself why you get sick?

_____question has been asked _____many years and still _____

be answered completely. In _____Mexico many people have _____because

they did not _____how to prevent or _____a disease.

People did_____understand why all of _____sudden someone from their

_____died because of a _____disease.

Now that you have read the article on why people get sick, answer the questions below. If you can't answer a question read the article again to complete the question. 1.1

1. Why have many people in New Mexico been unable to prevent or cure a disease in the past?

2. Where did Louis Pasteur live?

3. What causes people to get sick?

4. What is meant by one celled micro-organism?

5. What was made from mold?

6. Why is it difficult to destroy bacteria?

7. Why are we immunized against certain diseases?

8. Why is bacteria harmful?

Instructions:

In this passage you will read about the different types of bacteria. The information it contains will help you understand your trade better. You are provided with a list of words that are important in this article. Check each word carefully before you read this article.

Instrucciones:

En esta selección vas a leer acerca las diferentes clases de bacteria. La información que contiene este artículo te ayudará a comprender mejor tu trabajo. Tienes una lista de palabras importantes que aparecen en este artículo. Lee cada palabra cuidadosamente.

Vocabulary	Vocabulario
bacteria	bacteria
pathogenic	patogenica
non-pathogenic	no-patogenica
contagious	contagiosa
hair root	raíz del cabello
injection	inyección
chemically	químicamente

Keep these questions in mind when you are reading this article.
Recuerda las siguientes preguntas al leer este artículo.

1. Identify the different types of bacteria.
   Identifica los diferentes tipos de bacteria.

2. What is meant by pathogenic bacteria?
   ¿Qué significa bacteria patogénica?

3. What is meant by non-pathogenic bacteria?
   ¿Qué significa bacteria no-patogénica?

4. How can pathogenic bacteria spread in the barber or beauty shop?
   ¿Cómo se puede contaminar con bacteria patogénica en una peluquería o salón de belleza?

Is All Bacteria Bad?

1. From what you have read, you know that bacteria causes you to get sick. But is all bacteria bad?

2. Scientists that discovered how to fight bacteria found that not all bacteria can cause you harm. In fact, other people discovered how to fight harmful bacteria with non-harmful bacteria. They got a piece of old, moldy bread full of bacteria and changed it chemically to penicillin. So they found that bad or harmful bacteria in our body can be killed by injecting a shot of good or non-harmful bacteria called penicillin.

3. We have special names for harmful and non-harmful bacteria. Harmful bacteria is called path-o-gen-ic. Path-ogen-ic means that it causes you to get sick. Bacteria that does not harm you or get you sick is called non-pathogenic.

4. It is too bad that there are many more kinds of harmful bacteria than good bacteria. Pathogenic bacteria causes many kinds of diseases to attack our bodies. When a person is weak or when he is not immune, he can get sick very easy. Some diseases are very contagious. They are very easy to catch from another person.

5. Pathogenic bacteria grows in almost every place you can think of. One place is our body. We must always keep it clean. One part of our body where pathogenic bacteria grows is our hair. Our hair is dead. The only living part is the root. It is very easy for germs or bacteria to grow in our dead hair.

¿Es Dañina Toda la Bacteria?

1. Ya sabes que bacteria causa enfermedades. Pero, es dañina toda la bacteria?

2. Científicos que descubrieron como combatir bacteria hallaron que no toda la bacteria es dañina. Hasta se descubrió como combatir bacteria dañina con bacteria no dañina. Hicieron penicilina químicamente convirtiendo molde de pan mojoso a penicilina. Hallaron que bacteria dañina se puede combatir en el cuerpo humano inyectando con bacteria no-dañina llamada penicilina.

3. Hay nombres especiales para bacteria dañina y no dañina. Bacteria dañina se llama patógena. Patógena quiere decir que causa enfermedad. Bacteria que no es peligrosa o que no causa enfermedad se llama no-patógena.

4. Desafortunadamente, hay muchas mas clases de bacteria patógena que bacteria no-patógena. Bacteria patógena causa muchas enfermedades que ataquen a tu cuerpo. Si una persona está débil o nó esta inmuna, se puede enfermar muy fácilmente. Algunas enfermedades son muy contagiosas. Es muy fácil transmitar estas enfermedades de una persona a otra.

5. Bacteria patógena crece dondequiera. Nuestro cuerpo también es un lugar donde crece la bacteria. Por eso es muy importante siempre mantenerlo limpio. En el pelo también crece la bacteria patógena. La única parte del pelo que tiene vida es la raíz. Así, es muy fácil que crezca bacteria patógena en el pelo, como no tiene vida.

Find The Answers

1. The thing that causes you to get sick is

   A. Poor eating habits
   B. Mouth contact
   C. Bacteria
   D. Dirty hands

2. The word in paragraph 2 that means not good is_____.

3. The words "it causes you to get sick" in paragraph 3 refer to the word _____ _____.

4. The story does not say so, but it makes you think that

   A. All bacteria is good
   B. All bacteria is bad
   C. There's good and bad in all things

5. Old, moldy bread full of bacteria can be used to prevent disease.

   Yes No Does not say

6. On the whole, this story is about

   A. Pathogenic & non-pathogenic bacteria
   B. Moldy bread
   C. Sterilization

7. Why is it important to keep our bodies clean?

   A. To look clean
   B. Fight non-pathogenic bacteria
   C. Fight pathogenic bacteria

Fill in the blanks with the word you think belongs without looking back at the original article. 1.2

It is too bad _____there are many more _____of harmful bacteria than _____bacteria. Pathogenic bacteria causes _____kinds of diseases to _____our bodies. When a _____is weak or when _____ is not immune, he _____get sick very easy. _____diseases are very contagious. _____are very easy to _____from another person.

- - - -

From what you have read you should be able to answer these questions. If you have difficulty go back to readings one & two.

1. When a disease can be caught by a person very easily it is said to be highly _____.

2. Another word for bacteria is _____.

3. A harmful disease spreading bacteria is called _____bacteria.

4. Another word for shot is an _____.

5. When a person is given a shot to fight disease he is _____.

6. Penicillin is a medicine made _____from mold.

7. Bacteria can _____by dividing in half.

8. Minute, one-celled vegetable _____are especially numerous in dust, dirt, refuse, and diseased tissues.

9. One way to _____germs is by using a disinfectant.

10. A harmless type of bacteria is called _____.

Answer the following questions: 1.2

1. How is it possible to fight harmful bacteria with non-harmful bacteria?

2. When is a person liable to catch a very contagious disease?

3. What does the word patho mean?

4. Why would a person who works with hair have to be concerned about bacteria?

5. Where is pathogenic bacteria likely to be found in a shop?

6. Who was the man that found how to fight harmful bacteria?

Instructions:

In this selection you will read about two types of pathogenic bacteria. In another selection you will read about the third type of pathogenic bacteria. This information should help you in your skill area. You are provided with a list of words that are important in this article. Check each word carefully before you read the article.

Instrucciones:

En este selección vas a leer de dos clases de bacteria patogénica. En otra selección vas a leer del tercer tipo de bacteria patogénica. Esta información te ayudará en tu área vocacional. Tienes una lista de palabras importantes que aparecen en este artículo. Lee cada palabra cuidadosamente.

Vocabulary	Vocabulario
bacteria	bacteria
pathogenic	patogénica
cocci	cocci
streptococci	estretococci
staphylococci	estáfilococci
diplococci	diplococci
pneumonia	pulmonía
spirilla	espirila
syphillis	sífilis

Keep these questions in mind when you are reading this article.
Recuerda estas preguntas al leer este articulo.

1. What is meant by pathogenic?
   ¿Qué significa patogénica?

2. What are the three types of cocci bacteria and how are they shaped?
   ¿Cuáles son los tres tipos de bacteria y cómo es su forma?

3. Name at least one disease that can be caused by each of the following: streptococci, staphylococci, and diplococci.

   Nombra a lo menos un tipo de enfermedad que es causada por cada de los siguientes: estretococci, estáfilococci, y diplococci.

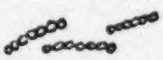
4. What is the second group of pathogenic bacteria, what does it look like, and what disease does it cause?

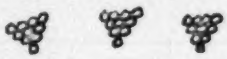
   ¿Cuál es el segundo grupo de bacteria patogénica, cuál es su forma y qué enfermedad causa?

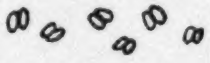
Types of Harmful Bacteria

1. You know from what you have read that there are two kinds of bacteria. They are harmful and non-harmful. Pathogenic is a name for harmful bacteria. There are many kinds of harmful bacteria. It is hard to remember their names but we will try to group them so it will be easier to remember them.

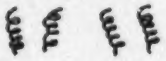
2. The first group of pathogenic bacteria is called coc-ci. When you look at coc-ci bacteria through a microscope you can see that they look like oranges. They are round in shape. Coc-ci is the general name given to all round shaped bacteria. Just like a general name like bread, we know that there are different kinds of bread. There is french bread, toasted bread, loaf, etc.

3. There are three members in the cocci family. One is called strep-to-coc-ci This round bacteria looks like a chain.  It causes blood poisoning.

4. Another coc-ci or round bacteria is the staph-y-lo-coc-ci. Staph means that they are in bunches. They are round and look like grapes. They are found in boils and abscesses. 

5. The last coc-ci or round bacteria is the dip-lo-coc-ci. These are found in pairs.  This bacteria causes pneumonia.

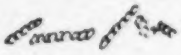
6. We can call this first group of pathogenic bacteria the coc-ci family. There are three members that we have seen.

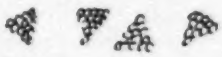
7. The second group or family of harmful bacteria is called the spirilla. The spi-rill-a looks like a corkscrew or a pig's tail.  There are no members in the spirilla family--It causes syphillis.

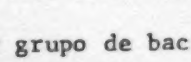
Tipos de Bacteria Dañina

1. Ya has leído que hay dos clases de bacteria dañina y no-dañina. Patógena es el nombre que se llama a la bacteria dañina. Hay muchas clases de bacteria dañina. Es difícil recordar todos los nombres, pero trateremos de agruparlos para que sea más fácil recordarlos.

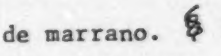
2. El primer grupo de bacteria patógena se llama coco. Al ver la bacteria coco en un microscopio puedes ver que tienen la aparencia de naranjas. Tienen una forma redonda. Coco es el nombre general que se le da a toda bacteria de forma redonda. Es como el nombre general que se le da a varias cosas como pan. Ya sabemos que hay una variedad de pan como pan francés, pan tostado, torta de pan, etc.

3. Hay tres miembros en la familia coco. Uno es llamado estreptococo. Esta bacteria de forma redonda parece una cadena.  Esta causa septicemia.

4. Otro coco o bacteria de forma redonda es estáfilococo. Estáfilo significa que están agrupados. Estos son redondos y parecen uvas. Estos se encuentran en furúnculos o diviesos y abscesos. 

5. El último grupo de coco o bacteria es diplococo. Estos se encuentran en pares.  Esta bacteria causa pulmonía.

6. Podemos llamar este primer grupo de bacteria patógena la familia coco. Ya hemos visto tres miembros de este grupo.

7. El segundo grupo o familia de bacteria dañina es llamado espirila. La bacteria espirila parece un sacacorchos o colitas de marrano.  No hay miembros en la familia espirila. Espirila causa sífilis.

Find The Answers 1.3

1. Harmful bacteris is called:

   A. Non-pathogenic
   B. Poison
   C. Pathogenic

2. The word in paragraph 1 that means germs is _____.

3. The words "round shaped bacteria" in paragraph 2 refers to the word _____

   _____.

4. The story does not say so, but it makes you think that

   A. Harmful germs are called cocci
   B. Bacteria all look the same
   C. Germs can be dangerous

5. The spirilla bacteria causes syphillis.

   Yes No Does not say

6. On the whole this story is about

   A. Blood poisoning
   B. Types of harmful bacteria
   C. Different kinds of bread

7. Why is it important to know the different kinds of bacteria?
   (Check the story again)

   A. To be able to identify diseases
   B. To help teachers
   C. To control non-pathogenic bacteria

Match the following words with the proper definitions 1.3

_____bacteria	A. causes boils and abscesses
_____pathogenic	B. harmful
_____diplococci	C. corkscrew-shaped bacteria
_____staphylococci	D. all round shaped bacteria
_____streptococci	E. one-celled micro-organism
_____cocci	F. bacteria found in pairs
_____spirilla	G. sickness caused by diplococci
_____syphillis	H. bacteria found in chains
_____pneumonia	I. disease caused by spirilla

Fill in the blanks with the word you think belongs without looking back at the original article.

The first group of _____ bacteria is called cocci. _____ you look at cocci _____through a microscope you _____see that they look _____oranges. They are _____in shape. Cocci is _____ general name given to _____round shaped bacteria. Just _____ we have a general name _____bread, we know that _____are different kinds of _____. There is french bread, _____ bread, loaf, etc.

In your own words write a short paragraph on what you have read about the types of harmful bacteria.

Unscramble the following letters to form words:

1. atrbciae _____
2. thclspoccayoi _____
3. esoocittccrp _____
4. iccocolpid _____
5. siilalrp _____

Now that you have read the article on the types of harmful bacteria, answer the questions below. If you can't answer a question read the article again to complete the question.

1. What is the difference between pathogenic and non-pathogenic bacteria?

2. Name the three types of cocci and illustrate their shape.

3. Identify the three types of cocci and a disease they can each cause.

4. What is the name of the species of bacteria that grows in corkscrew-shaped formations?

5. What is the general shape of the cocci family?

Instructions:

In this selection you will read about the third member of the pathogenic bacteria family. This member is the bacilli. You will see that the bacilli family also has several members. Below is a list of words which are important in this article. Check each word carefully before you read the article.

Instrucciones:

En esta selección vas a leer del tercer miembro de la familia de bacteria patogénica. Este miembro se llama bacilo. Vas a ver que la familia bacilo tiene varios miembros. Abajo sigue una lista de vocabulario que es importante en esta selección. Lea cada palabra cuidadosamente.

Vocabulario	Vocabulary
coco	cocci
bacilos	bacillus
spirila	spirilla
tétanus/bacilos	tetanus/bacillus
tubérculo/bacilos	tubercle/bacillus
tifoideo/bacilos	typhoid/bacillus
cólera/bacilos	cholera/bacillus
difteria/bacilos	diphtheria/bacillus
influenza/bacilos	influenza/bacillus
flu	flu
tuberculosis	tuberculosis
fiebre/tifoideo	typhoid fever

Keep these questions in mind when you are reading this article.
Recuerda estas preguntas al leer esta selección.

1. What do spirilla and cocci bacteria have in common?
   ¿Cómo se parecen la bacteria cocci y bacillos?

2. What characteristics do the members in the bacillus family have?
   ¿Qué características tienen los miembros de la familia de bacteria bacilos?

3. What members of the bacillus family causes each of the following diseases: typhoid fever, tuberculosis, diphtheria, flu, cholera, tetanus.

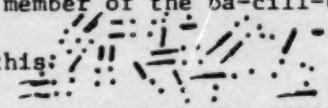
   Nombra los miembros de la familia bacilos cuales causan las siguientes enfermedades: fiebre tifoideo, tuberculosis, difteria, flu, cólera, tétanus.

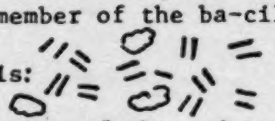
4. What is the shape of each member of the bacillus family?
   ¿Cómo es la forma de cada miembro de la familia bacilos?

1. From what you have read you know that the coc-ci bacteria is one group or family of harmful bacteria. Another family is the spirilla. The spirilla and the coc-ci are related because they are both harmful.

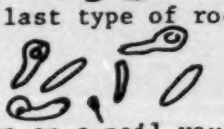
2. The third group or family of pathogenic bacteria is the ba-cill-i family. The ba-cill-i family all look like rods or cigars. There are six members in the ba-cill-i family. The first member is the typhoid ba-cill-us. This bacteria looks like hairy cigars . It causes typhoid fever.

3. The second member of the cigar shaped family is the tu-ber-cle ba-cill-us. It looks like this: It causes tuberculosis.

4. The third member of the ba-cill-us family is the diph-ther-i-a ba-cill-us. It looks like this:  It causes the disease called diphtheria.

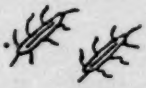
5. The fourth member of the ba-cill-us family is what we know as the flu. It looks like this:  It is called the in-flu-en-za ba-cill-us.

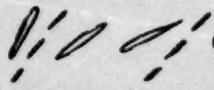
6. The fifth member of the rod or cigar shaped bacteria is called the cho-ler-a. It looks like this .

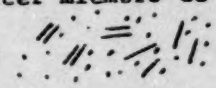
7. The sixth and last type of rod shaped bacteria is the tetanus bacillus. It looks like this:  This bacteria causes tetanus. When you cut yourself or step on a nail you usually get a tetanus shot to prevent the bacteria from forming in your wound.

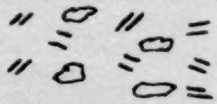
¿Hay Parientes entre la Bacteria?

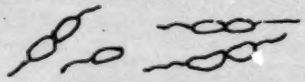
1. Ya has leído que la bacteria coco es un grupo o familia de bacteria dañina. Otro grupo es la familia espirila. La espirila y el grupo coco se consideran parientes porque ambos son dañinos.

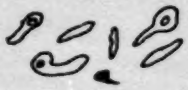
2. El tercer grupo o familia de bacteria patógena es la familia bacilo. Todos los miembros de la familia bacilo parecen bastoncillos o cigarros. Hay seis miembros en la familia bacilo. El primer miembro es el bacilo tifoideo. Esta bacteria parece cigarillos peludos.  Este miembro causa fiebre tifoidea.

3. El segundo miembro de la familia de forma cigarro es el tubérculo bacilos. Este parece así:  Causa tuberculosis.

4. El tercer miembro de la familia bacilo es el bacilo difteria. Este parece así:  Este causa la enfermedad llamada difteria.

5. El miembro cuarto de la familia bacilo es lo que conocemos como influenza o flu. Este parece así:  Este se llama bacilo influenza.

6. El quinto miembro de la familia bacilo se conoce por el nombre cólera. Parece así: 

7. El último y sexto miembro de la familia de forma bastoncillo o cigarro se llama tétano bacilo. Parece asi:  Esta bacteria causa tétanos. Si te haces una herida con un clavo, debes de recibir una inyección para tétanos para prevenir la formación de bacteria en la herida.

Find The Answers 1.4

1. The third family of pathogenic bacteria is

   A. parasites
   B. staphylococci
   C. bacilli
   D. germs

2. The word in paragraph 2 that means part of is _____.

3. The words "it looks like this" in paragraph 6 refer to the word _____.

4. The story does not say so, but it makes you think that

   A. Most bacteria is harmful
   B. Bacilli is not dangerous
   C. All bacteria is harmful

5. There are six members in the bacilli family.

   Yes No Does not say

6. On the whole, this story is about

   A. Types of cocci bacteria
   B. Types of bacilli bacteria
   C. Types of spirilla bacteria

7. What is the name of the shot usually given after stepping on a rusty nail?

   A. Penicillin shot
   B. Virus shot
   C. Tetanus shot

Match the following words with the proper definitions 1.4

_____bacillus	A. disease which can be caused by rust
_____typhoid bacillus	B. third group of pathogenic bacteria
_____tetanus	C. second group of harmful bacteria
_____tubercle bacillus	D. bacteria which looks like hairy rods
_____spirilla	E. causes tuberculosis

Draw a simple illustration of each of the following types of bacteria:

1. tetanus bacillus

2. typhoid bacillus

3. cholera bacillus

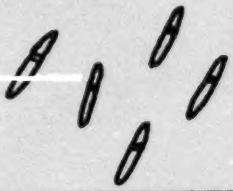
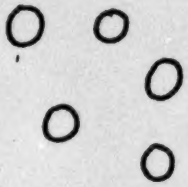
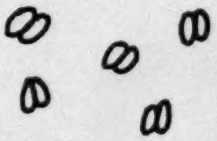
4. tubercle bacillus

5. diphtheria bacillus

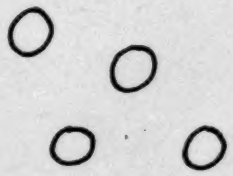
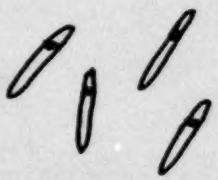
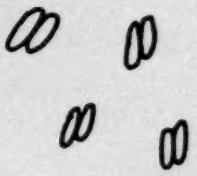
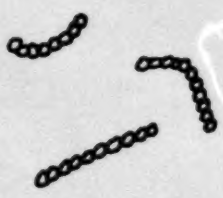
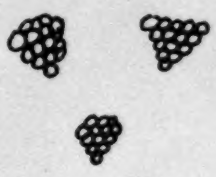
6. influenza bacillus

FILL IN THE BLANKS. Refer to readings 3 and 4.

1.4

Palabras	Retrato	Se parecen a?	Enfermedad
_____		Cigarros	Typhoid, Cholera _____ Tetanus, Diphtheria Influenza
Spirilla	_____	Colitas de marrano	_____
_____		Unas naranjas	_____
A. Staphylococci		_____	Abscesses, pustules boils
B. Streptococci	_____	Unas cadenas	_____
C. _____		Huevos	Pneumonia, Gonorrhea

FILL IN THE BLANKS. Refer to readings 3 and 4.

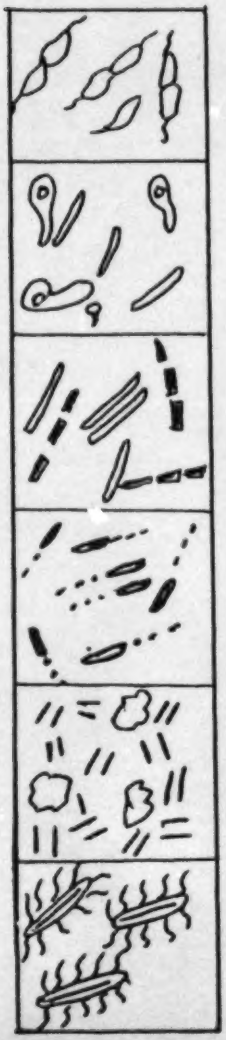
_____		Colitas de marrano	Syphillis
_____		Unas Naranjas	
_____		Cigarros	Typhoid, Cholera, Tetanus, Diphtheria Tuberculosis, Influenza
_____		Huevos	Pneumonia, gonorrhea
_____		Unas cadenas	Blood poisoning
_____		Un ramo de uvas	Abscesses, pustules, boils

Now that you have read the article on relatives in the bacteria family, you can answer the questions below. If you can't answer some of the questions, read the article again to complete the exercise.

1. What is the name of the third group in the pathogenic bacteria family?

2. Describe the bacillus family.

3. Identify the following samples of bacteria by placing the letter of the correct name next to each illustration.



A. influenza bacillus

B. typhoid bacillus

C. tetanus bacillus

D. diphtheria bacillus

E. cholera bacillus

F. tubercle bacillus

Instructions:

In this passage you will read about parasites and saprophytes. The information it contains will help you understand your trade better. You are provided with a list of words that are important in this article. Check each word carefully before you read this article.

Instrucciones:

En esta selección vas a leer acerca de parásitos y saprofitos. La información que contiene este artículo te ayudará a comprender mejor tu trabajo. Tienes una lista de palabras importantes que aparecen en este artículo. Lee cada palabra cuidadosamente.

Vocabulary	Vocabulario
parasite	parásito
saprophytes	saprofitos
bacteria	bacteria
mildew	mojo
victims	víctimas
decay	pudrir

Keep these questions in mind when you are reading this article.
Te debes de hacer estas preguntas al leer este artículo.

1. How can bacteria be categorized?
   ¿Cómo se puede categorizar bacteria?

2. What are parasites?
   ¿Qué son parásitos?

3. What are saprophytes?
   ¿Qué son saprofitos?

4. What are examples of harmful and helpful parasites and saprophytes?
   ¿Cuáles son ejemplos de parásitos y saprofitos útiles y dañosos?

Are Parasites and Saprophytes Harmful?

1. As you recall, bacteria is found just about everywhere. Most bacteria are parasites. Parasites feed on or live off another animal or plant. Some parasites are harmful. For example, some parasites feed on the blood of animals or humans, and may even cause death. Other parasites may be useful.

2. Saprophytes are like parasites, but they live on dead or decaying matter. Some saprophytes, like parasites, are useful and some are harmful. An example of useful saprophytes are those found in decaying plants. Saprophytes help in turning these plants into soil.

3. People who work in beauty shops and barber shops should be very aware of different types of parasites that may be found in human hair. Lice are one type of parasite that may be found in humans. These parasites suck blood from their victims.

4. Saprophytes may be found in the form of mold and mildew. These are sometimes formed in dirty towels or instruments. Cleanliness is very important so as to prevent the formation of such saprophytes in beauty shops and barber shops.

¿Son Dañinos los Parásitos y Saprófitos?

1. Como ya sabes, bacteria se encuentra por dondequiera. La mayoría de bacteria son parásitos. Parásitos se alimentan de otros animales o plantas. Algunos parasitos son dañinos. Por exemplo, algunos parásitos se alimentan de la sangre de animales o humanos, y hasta pueden causarles que mueran. Otros parásitos son útiles.

2. Saprófitos son semejantes a parásitos, pero estos se alimentan de materia orgánica muerta o podrida. Algunos saprófitos, como parásitos, son útiles y otros son dañinos. Un exemplo de saprófitos son esos que se hallan en plantas que se están pudriendo. Los saprófitos ayudan en el proceso de tranformar las plantas a tierra.

3. Los empleados de salones de belleza o peluquerías deben de estar conscientes de los diferentes tipos de parásitos que se encuentran en el pelo humano. El piojo es un tipo de parásito que se encuentra en humanos. Estos parásitos chupan sangre de sus víctimas.

4. Saprófitos se pueden encontrar en la forma de molde o mojo. A veces se forman en toallas sucias o en instrumentos. La limpieza es muy importante para prevenir la formación de saprófitos en el salón de belleza y en la peluquería.

Find The Answers 1.5

1. Parasites feed or live on

   A. Mold
   B. Animal or Plant
   C. Dead or decaying matter
   D. Lice

2. The word in paragraph 2 that means rotting is_____.

3. The words "may be found in the form of mold and mildew" in paragraph 4 refer to the word _____.

4. The story does not say so, but it makes you think that

   A. Saprophytes are good for towels or instruments
   B. Saprophytes are harmful in beauty shops and barber shops
   C. Cleanliness is not important

5. Mildew is a form of parasite.

   Yes No Does not say

6. On the whole this story is about

   A. Different kinds of lice
   B. Parasites and Saprophytes
   C. Harmful and useful bacteria

7. Why is it important to be able to distinguish between useful or harmful parasites and saprophytes?

   A. Prevent spread of disease
   B. Makes us better educated
   C. In case we're tested

Now that you have read the article on parasites and saprophytes answer the questions below. If you can't answer a question, read the article again to complete your answer.

1. What are saprophytes?

2. What are parasites?

3. How can parasites and saprophytes be helpful?

4. Explain how parasites can be found on humans and how they can spread.

5. Where can saprophytes be found in a beauty or barber shop?

6. How can a person get rid of parasites in a barber or beauty shop?

- - - - - -- - - - - - - - - - - - -- -- - - - - - - - - - - - - - - -

Place proper letter for each blank to correctly spell the word. Rewrite each word you spell wrong. Also give definition for each word.

par__s__t__ _____

_____

m__ __d__w _____

_____

s__p__op__y__ __s _____

_____

d__c__y _____

_____

ba__ __er__ __ _____

_____

b__ci__ __i _____

_____

s__ir__ll__ _____

_____

c__c__ __ _____

_____

Mark T for true and F for false:

_____Parasites live off dead matter.

_____Saprophytes are micro-organisms.

_____We can find bacteria on dead matter.

_____Parasites may be found in human hair.

_____Saprophytes can be formed on dirty towels or instruments.

_____Lice are very contagious.

_____Parasites suck blood from their victims.

_____Saprophytes and parasites are bacteria.

Fill in the blanks without looking at the article you have read. 1.5

As you recall, bacteria _____found just about everywhere. _____ bacteria are parasites. Parasites _____on or live off _____ animal or _____. Some parasites are harmful. _____example, some parasites feed on the _____of animals or humans, and _____even cause death . Other _____may be useful.

Saprophytes are like parasites, they live on dead _____decaying matter. Some _____, like parasites, are useful and _____are harmful. An example of _____saprophytes are those found in decaying plants. Saprophytes help in turning _____plants into soil.

Match the following words with the proper definition.

_____mildew	A. another word for mold
_____parasite	B. round shaped bacteria
_____bacteria	C. bacteria that live off dead plants and animals
_____victim	D. disease forming micro-organism
_____decay	E. bacteria that lives off live plants and animals
_____saprophytes	F. rod shaped bacteria
_____bacilli	G. spiral shaped bacteria
_____spirilla	H. to rot
_____cocci	I. plant or animal infested with parasites

POST-TEST FOR BACTERIOLOGY

1. Draw the three basic shapes of bacteria.

2. What is meant by pathogenic and non-pathogenic?

3. What is a micro organism?

4. What are the two types of bacteria?

5. What are parasites?

6. Define bacteria and where it can be found.

7. What is a disease and how can it be spread?

8. Explain what the word immune means.

9. What are saprophytes?

10. List the three members of the cocci bacteria family and their related disease.

11. Who was Louis Pasteur?

POST-TEST CONTINUED

12. How does bacteria reproduce?

13. Name the six members of the bacilli family and their related diseases.

14. Name three general types of pathogenic bacteria.

Vocabulary	Vocabulario
mildew	moho
mold	moho
multiply	aumentarse
non-pathogenic	no-patogénica
parasite	parásito
pathogenic	patogénica
penicillin	penicilina
pneumonia	pulmonía
poison	veneno
polio	polio
saprophyte	saprofito
scientist	científico
sick	enfermo
spirilla	espirila
split	partir
staphylococcus	estafilococo
strange	extraño
streptococcus	estreptococo
suck	chupar
syphilis	sífilis
tetanus	tétanus
tuberculosis	tuberculosis
typhoid	tifoideo
victim	víctima

Vocabulary	Vocabulario
abscesses	apostema
bacillus	bacilos
bacteria	bacteria
barber shop	peluquería
beauty shop	salón de belleza
boil	tumor
chemical	químico
cholera	cólera
cocci	coco
contagious	contagiosa
decay	pudrir
destroy	destrozar
diphtheria	difteria
diplococcus	diplococo
discover	descubrir
disease	enfermedad
flu	resfriado
germ	germen
harm	daño
immune	inmuno
influenza	influenza
inject	inyectar
instrument	instrumento
medicine	medecina
micro-organism	micro-organismo
microscope	microscopio